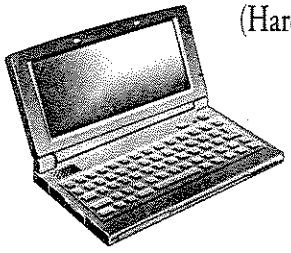
CASSIOPEIA

A-20
Getting Started with the CASSIOPEIA

(Hardware Manual)



User documentation consists of two manuals: H/PC Companion and Getting Started with the CASSIOPEIA. Be sure to read this Getting Started manual first.

Be sure to read the Safety Precautions contained in this Getting Started manual to ensure proper operation of this product.

Keep this Getting Started manual in a safe place for future reference.

CASIO

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THIS UNIT IN THE U.S.A. (not applicable to other areas).

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Connector ..... Pocket PC unit to A-D10LC
Connector cable that comes with Pocket PC
..... Pocket PC unit to desktop computer
Connector SB-62 ..... Pocket PC unit to QV

Declaration of Conformity

Model Number:	A-20
Trade Name:	CASIO COMPUTER CO., LTD.
Responsible party:	CASIO, INC.
Address:	570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801
Telephone number:	973-361-5400

This device complies with Part 15 of the FCC Rules, Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- Microsoft, Windows, Windows NT and PowerPoint are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- Pentium is a registered trademark of Intel Corporation.
- CompactFlash is a registered trademark of SanDisk Corporation.
- All other product and company names mentioned herein may be the trademarks of their respective owners.

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスB 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをしてください。

Safety Precautions

Congratulations upon your selection of the CASSIOPEIA. Be sure to read the following Safety Precautions before trying to use it for the first time.

Markings and Symbols

The following are the meanings of the markings and symbols used in these Safety Precautions.

- A diagonal line indicates something you should not do. The symbol shown here indicates you should not try to take the unit apart.
- A black circle indicates something you should do. The symbol shown here indicates you should unplug the CASSIOPEIA from the wall outlet.

⚠ Danger This symbol indicates information that, if ignored or applied incorrectly, creates the danger of death or serious personal injury.

Rechargeable Battery Pack

- Never try to take apart the battery pack or modify it in any way. The battery pack has a built-in safety and protection mechanisms that ensure safe operation. Damaging these mechanisms creates the danger of heat emission, smoke emission, fluid leakage, bursting of the battery pack, and fire.
- Never allow the positive (+) and negative (–) terminals of the battery pack to become connected by metal. Never transport or store the battery pack together with a necklace, hair pins or other metal objects. Doing so can short the battery pack and cause large amounts of current to flow through the metal, which creates the danger of bursting of the battery pack, heat emission, smoke emission, and fire, as well as burning of the metal object shorting the two terminals.
- Never dispose of the battery pack by incinerating it and never expose it to heat. Doing so can melt its insulation, and damage the gas exhaust port and safety mechanism. This creates the danger of ignition of the battery pack's fluid, heat emission, smoke emission, bursting of the battery pack, and fire.

- Never use or leave the battery pack next to open flame, near a stove, or any other area exposed to high heat (80°C/170°F or greater). Doing so can damage the resin separator of the battery pack, which creates the danger of shorting, heat emission, smoke emission, bursting of the battery pack, and fire.
- Never allow the battery pack to become wet with either fresh water, salt water or other liquid. Water can damage the battery pack's safety mechanism, which creates the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Never charge the battery pack near open flame, in an area expose to direct sunlight, in a car parked in direct sunlight, or any other very hot area. High temperatures activate the battery pack's protection mechanism, which automatically terminates charging. High temperatures can also damage the protection mechanism, which results in abnormal charging current and voltage that can cause an abnormal chemical reaction inside the battery pack, creating the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Never stick the battery pack with nails, hit it with a hammer, or step on it. Doing so can cause the battery pack to collapse or become deformed, and result in internal shorting, which creates the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Never throw the battery pack or otherwise subject it to strong impact. Strong impact can damage the protection mechanism, which results in abnormal charging current and voltage that can cause an abnormal chemical reaction inside the battery pack, creating the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Never use a battery pack whose exterior is extremely damaged or deformed. Use of such a battery pack creates the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Never apply solder directly to the battery pack. Heat from the solder can melt insulation and damage the gas exhaust port and safety mechanism, creating the danger of heat emission, smoke emission, bursting of the battery pack, and fire.

- Never use the battery pack with any device other than this product. Doing so can cause deterioration of the battery pack's performance and shortening of its life, as well as abnormal current that damages the battery pack and creates the danger of heat emission, smoke emission, bursting of the battery pack, and fire.

- When charging the battery pack, use only an AC adapter specified by CASIO and charge in an area where the temperature is between 10°C/50°F and 35°C/95°F. Use of a non-recommended AC adapter can result in overcharging of the battery pack and in abnormal charging current, which can cause an abnormal chemical reaction inside the battery pack, creating the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Note that the battery pack's positive (+) and negative (–) terminals must be oriented correctly when it is loaded in to the CASSIOPEIA. If you ever experience a problem establishing a connection between the battery pack and the CASSIOPEIA, never force a connection. Check the orientation of the positive and negative terminals of the battery pack. Connecting the battery pack with its terminals reversed results in reverse charging that can cause an abnormal chemical reaction inside the battery pack, creating the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Should fluid from the battery pack ever accidentally get into your eyes, do not rub them. Rinse your eyes with tap water and then consult your physician immediately. Failure to get all of the fluid out can result in serious eye damage.

⚠ Warning This symbol indicates information that, if ignored or applied incorrectly, creates the possibility of death or serious personal injury.

Abnormal Conditions

- Continued use of the CASSIOPEIA while it is emitting smoke or strange odor creates the danger of fire and electrical shock. Immediately turn off power, remove batteries, unplug the AC adapter from the wall outlet, and contact your original dealer.

Power Supply and Voltage

- Never use a voltage that is different from that for which the CA$SIOPEIA is rated. Also, do not plug the CASSIOPEIA into a power outlet that is shared by other devices. Doing so creates the danger of fire and electrical shock.

Power Cord

- Never allow the power cord to become damaged, and never modify it or excessively bend, twist, or pull it. Do not place heavy objects on the power cord or expose it to heat. A damaged power cord creates the danger of fire and electrical shock.
- Never touch the power cord while your hands are wet. Doing so creates the danger of electrical shock.

AC Adapter

- Use only the AC adapter specified for this product. Use of another type of AC adapter creates the danger of bursting of the battery pack, fire, and personal injury.

Batteries

- Should battery fluid ever accidentally get into your eyes, rinse them with clean water and then consult your physician immediately.

Rechargeable Battery Pack

- Never place the battery pack into a microwave oven or a high-voltage device. Sudden heating can damage the battery pack's seal and create the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- Should the battery pack emit a strange odor or heat, change color or shape, or exhibit any other abnormal behavior while it is in use, being recharged, or in storage, immediately remove it from the CASSIOPEIA. Continued use of a battery pack exhibiting these symptoms creates the danger of heat emission, smoke emission, bursting of the battery pack, and fire.
- If the battery pack does not achieve full charge after the normal charging time has passed, stop charging. Continued charging creates the danger of heat emission, smoke emission, bursting of the battery pack, and fire.

- Should the battery pack starts to leak or emit a strange odor, immediately move it away from any nearby flame. Leaking battery fluid is combustible, and exposure to flame creates the danger of smoke emission, bursting of the battery pack, and fire.

Disassembly

- Never try to take the CASSIOPEIA apart or modify it in any way.

⚠ Caution This symbol indicates information that, if ignored or applied incorrectly, creates the possibility of personal injury or property damage.

Power Cord and AC Adapter

- Keep the power cord away from stoves and other sources of extreme heat. Heat can melt the insulation of the power cord and create the danger of fire and electrical shock.
- Keep the power cord away from containers filled with liquid. If the power cord gets into the liquid, it can create the danger of fire and electrical shock.
- Do not pull on the power cord when unplugging the AC adapter from the wall outlet. Doing so can damage the power cord and create the danger of fire and electrical shock. Be sure to grasp the AC adapter when unplugging it.
- Unplug the AC adapter from the wall outlet whenever leaving the CASSIOPEIA unattended for long periods.

Batteries

- Never try to take batteries apart, apply solder to them, or allow them to become shorted. Do not expose batteries to heat, and never dispose of them by incineration or by throwing them into water.
- If you remove the lithium battery from the CASSIOPEIA, take care to keep it in a place where there is no danger of it being accidentally swallowed. Be especially careful around young children.
- Keep batteries out of the reach of young children. If a battery is accidentally swallowed, consult your physician immediately.

- Failure to observe any of the following battery precautions can cause batteries to leak, creating the danger of property damage and fire.
  - When loading batteries, make sure their positive (+) and negative (–) poles are facing correctly.
  - Never mix new batteries with old ones.
  - Never mix batteries of different types.
  - Do not leave batteries loaded in the CASSIOPEIA for a long time without periodically checking them.
  - Use only the batteries that are specifically recommended for the CASSIOPEIA.

Rechargeable Battery Pack

- Do not use the rechargeable battery pack in areas where static electricity is being generated. Doing so creates the danger of heat emission, bursting of the battery pack, and fire.

Water and Foreign Matter

- Should any foreign matter (such as metal pieces, water, or other liquid) ever get into the CASSIOPEIA, immediately turn off power, remove batteries, unplug the AC adapter from the wall outlet, and contact your original dealer.

Memory Protection

- Be sure to keep separate copies of all important data by saving it on a computer disk or other medium. Note that all data stored in CASSIOPEIA memory is deleted whenever batteries go dead. Memory contents can also become lost or corrupted due to malfunction and repair of the CASSIOPEIA.
- Be sure to carefully follow the instructions contained in this Getting Started manual whenever replacing batteries. Incorrect battery replacement can cause data in memory to become corrupted or lost.

Location

- Do not locate the CASSIOPEIA in an area subjected to large amounts of humidity or dust. Doing so creates the danger of fire and electrical shock.
- Keep the CASSIOPEIA away from food preparation area, stoves, and anywhere else it might be expose to oil smoke or steam. Such conditions create the danger of fire and electrical shock.

Avoid unstable surfaces.

- Never place the CASSIOPEIA on an unstable surface, on a high shelf, or in any other unstable location. Doing so creates the danger of it falling and causing personal injury.

Do not dispose by incineration.

- Never dispose of the CASSIOPEIA by incineration. Doing so creates the danger of fire and personal injury.

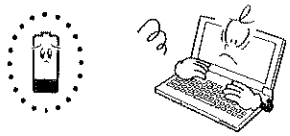
- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss resulting from the use of this manual.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any loss or claims by third parties which may arise through the use of this product.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, repairs, or battery replacement. Be sure to back up all important data on other media to protect against its loss.
- The contents of this manual are subject to change without notice.
- No part of this manual may be reproduced in any form without the express written consent of the manufacturer.

Operating Precautions

The CASSIOPEIA is a precision digital instrument. Incorrect operation and rough handling can cause data storage problems and other malfunction. Be sure to read the following precautions to ensure proper operation.

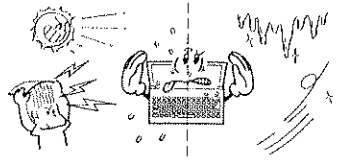
- Replace batteries as soon as possible when they start to become weak. Continued use while batteries are low can lead to loss of memory data.

- Do not leave dead batteries in the CASSIOPEIA for long periods. Doing so can result in battery leakage, which can damage the CASSIOPEIA and cause malfunction.



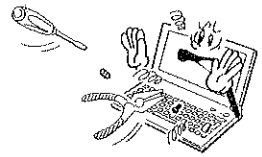
- Use the CASSIOPEIA under the conditions listed below.
  - Temperature: 0°C to 40°C (32°F to 104°F)
  - No condensation

  Conditions other than those above can cause malfunction.
- Avoid using the CASSIOPEIA in areas subjected to the following conditions.
  - Static electricity
  - Extreme heat or cold
  - High humidity
  - Sudden temperature changes
  - Large amounts of dust

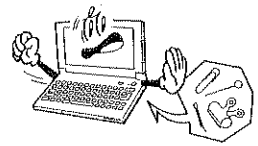


- If you drop the CASSIOPEIA and damage it, immediately turn off power and contact your original dealer. Never continue using a damaged unit.
- Never place heavy objects on top of the CASSIOPEIA.

- Never try to take the CASSIOPEIA apart. Doing so can cause malfunction.



- Never insert foreign objects into connectors, slots, or other openings.



- Take care to avoid spilling water or drinks on the CASSIOPEIA.

- Use only the stylus that comes with the CASSIOPEIA to press touch screen keys and the RESET button.
- Never use any object other than the stylus that comes with the CASSIOPEIA. Doing so can scratch the touch screen and cause malfunction.
- Never use thinner, benzene, cosmetics, or other volatile agents to clean the exterior of the CASSIOPEIA. Use only a dry soft cloth or a soft cloth moistened with a weak solution of water and mild neutral detergent.
- Frequent use of the backlight or optionally available PC cards (modem, etc.) results in battery life shorter than that indicated in the specifications of this Getting Started manual.

Contents

Safety Precautions 1
Operating Precautions 8
Documentation 11
How to Use the Documentation 11
Symbols Use in This Manual 11
Desktop Computer System Configuration 12
General Guide 14
Setting Up 16
Replacing Batteries 17
To replace the main batteries 18
To replace the back-up battery 19
Using the AC Adapter 20
Using the Rechargeable Battery Pack 21
To load the battery pack 21
To charge the battery pack 22
Adjusting Display Contrast 22
Reset 23
To reset the CASSIOPEIA 23
Full Reset 25
To perform a full reset 25
Connecting to a Desktop Computer 27
To connect to a desktop computer 27
Replacing the PC Card 28
To replace the PC card 28
Replacing the CompactFlash Card 30
To replace the CompactFlash card 30
Connecting to a Printer 32
To connect to a printer 32
Connecting to External Equipment 33
To connect external equipment 33
Infrared Data Communication 34
Built-in and Additional Software 35
Troubleshooting Guide 36
Technical Reference 40
About CASSIOPEIA standard interfaces 40
RS-232C interface 40
Hardware Specifications 41

Documentation

Your CASSIOPEIA comes with the following documentation.

- Getting Started with the CASSIOPEIA (this manual)
- H/PC Companion

How to Use the Documentation

Read this Getting Started manual first. It covers how to set up your CASSIOPEIA and load batteries to power it.

What should I do if the CASSIOPEIA does not do what I want it to?

See the troubleshooting guide on page 36 of the Getting Started manual.

Where can I find information about options and connecting the CASSIOPEIA to a desktop computer?

See the pages of this Getting Started manual noted below.

- Connecting to a desktop computer – page 27
- Connecting to External Equipment – page 33
- Replacing a PC card – page 28
- Replacing a CompactFlash card – page 30

Symbols Use in This Manual

Important ⚠

This symbol indicates important information about a procedure that can result in problems if not performed correctly. Be sure to read such information carefully.

Desktop Computer System Configuration

The computer configuration described below is required to support the installer and the software applications contained on the Microsoft CD-ROM supplied with the CASSIOPEIA.

- Microsoft Windows NT Workstation 4.0 or Windows 95 (U.S. version)
- Desktop computer with a 486/33DX or higher processor (Pentium P90 recommended)
- 12 MB of memory for Windows NT Workstation 4.0
  8 MB of memory (12 MB recommended) for Windows 95
- Hard disk drive with 10 to 50 MB of available hard disk space (actual requirements will vary based on selection of features and user's current system configuration)
- Available 9 or 25 pin communications port (adapter required for 25 pin communication port)
- One CD-ROM drive
- VGA or higher-resolution graphics card (Super VGA 256-color recommended)
- Keyboard
- Microsoft Mouse or compatible pointing device

Options for either Windows NT Workstation 4.0 or Windows 95:

- Audio card/speakers for sound
- Microsoft Office 97 or Microsoft Office 95
- Serial or built-in infrared adapter for synchronization
- Modem for remote synchronization
- Ethernet LAN connection for remote synchronization

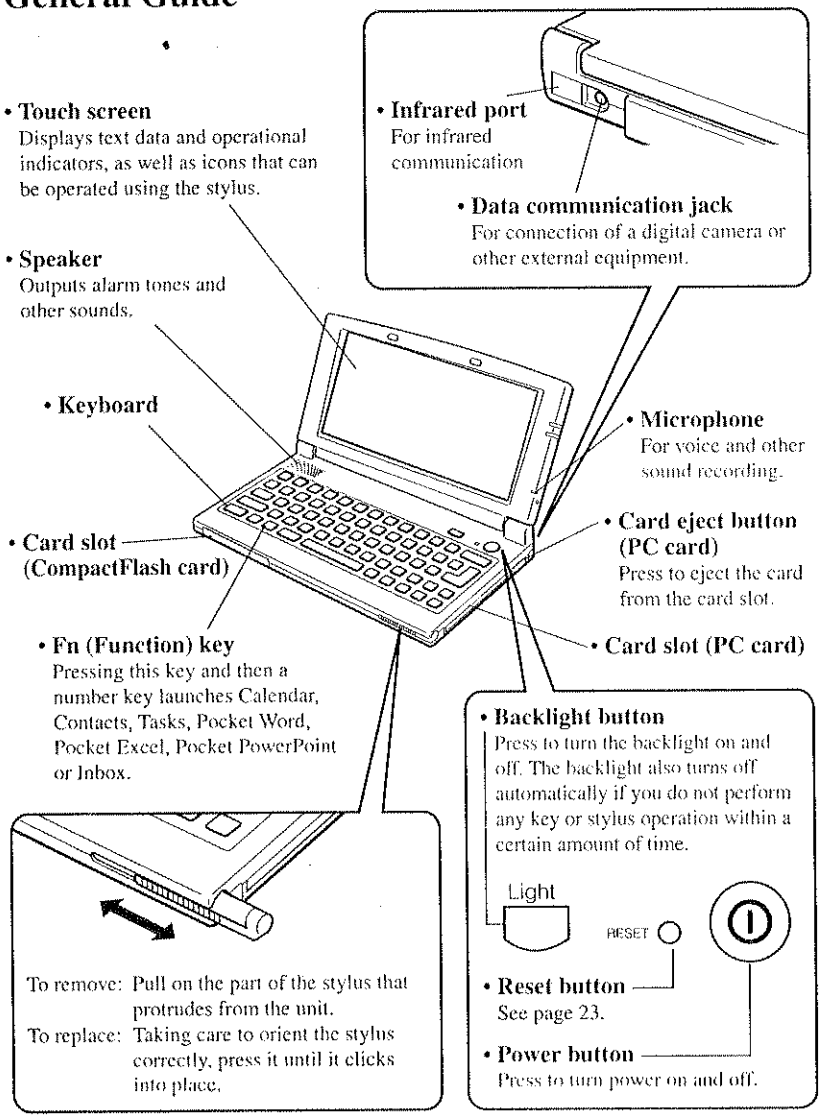
Important ⚠

- If you have a notebook PC with IrDA capabilities or a built-in modem, its COM port may not be set up for use as a standard serial interface. In such a case, you must change the COM port settings so it can be used as a standard serial interface. You should also check which COM ports are enabled on a desktop PC before starting to install Windows CE Services. See the documentation that comes with your PC for details.

Note

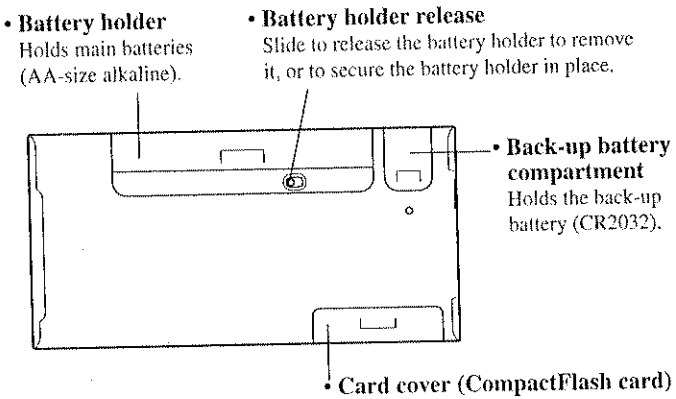
- Some of the applications contained on the CASSIOPEIA Bonus Software Applications CD-ROM may require a system configuration different from that described above. See the applicable files (ReadMe.txt and other files) that are also provided on the CD-ROM.

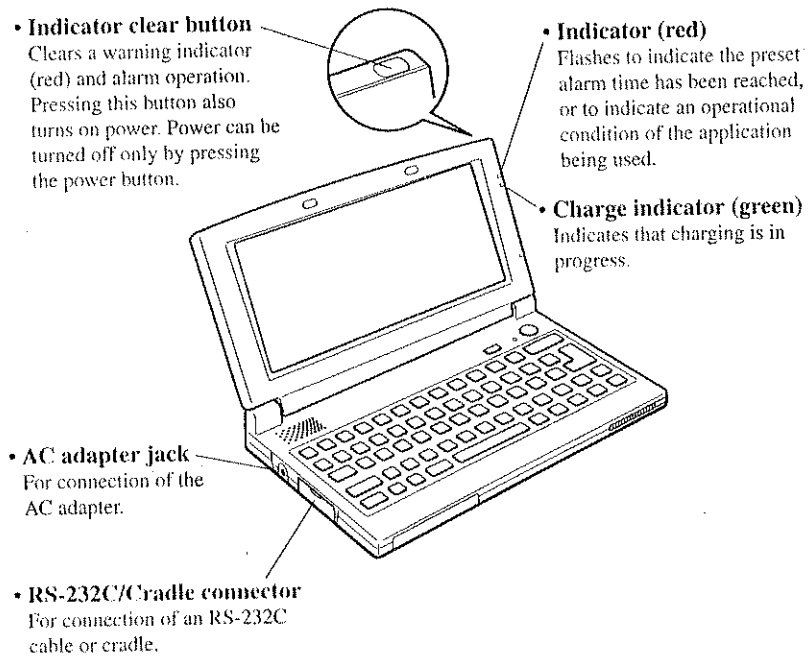
General Guide



• **Stylus**
For performing operations on the touch screen.

Important ⚠
- Take care to avoid damaging or losing the stylus.





Setting Up

Use the following procedure to set up the CASSIOPEIA before using it for the first time.

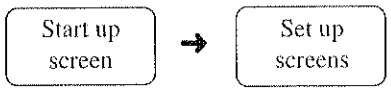
1. Load the main batteries.

- Load two AA-size alkaline batteries into the battery holder and then attach the holder to the CASSIOPEIA (page 17).

2. Load the back-up battery (page 19).

3. Wait for about five seconds, and then press the power switch to turn on power (page 14).

- Turning on power causes the CASSIOPEIA display to change in the sequence shown below.



4. Set up the CASSIOPEIA.

- Perform the procedures in accordance with the guidance messages that appear on the screen.

Important ⚠

- Should the display lock up or go blank at this time, first perform the full reset (page 25). If this does not correct the problem, remove the main batteries from the CASSIOPEIA and then remove the back-up battery. Wait for about five minutes, and then perform this procedure again, starting from step 1. Be sure that the positive (+) and negative (–) poles of the batteries are facing correctly when you reload them into the CASSIOPEIA.
- If the message "A problem with memory contents has been found, and memory must be initialized..." appears, perform the full reset operation described on page 25.
- If the images on the display appear dim, use the procedure on page 22 to adjust the contrast.
- **Further information on the above procedures can be found in the H/PC Companion manual in the section describing system set up.**

Replacing Batteries

The CASSIOPEIA has a dual power supply that consists of main batteries and a back-up battery. Be sure to load the main batteries and back-up battery before using the CASSIOPEIA for the first time after purchasing it. Also, replace batteries as soon as possible after they start to get weak.

Important ⚠

- Never remove both the main batteries and the back-up battery from the CASSIOPEIA at the same time. If you do, data stored in memory can be corrupted or lost entirely.
- Whenever the main batteries and the back-up battery both require replacement, be sure to replace the main batteries first, before replacing the back-up battery.
- Use two AA-size alkaline batteries or the optional rechargeable battery pack for the main power supply, and a CR2032 lithium battery for the back-up power supply. Never use any other type of battery with the CASSIOPEIA.
- Be sure to watch out for signs of low battery power. Replace main batteries as soon as possible after the message shown below appears on the display.

  "Your main batteries are running very low on power. Please change the batteries at your next opportunity."

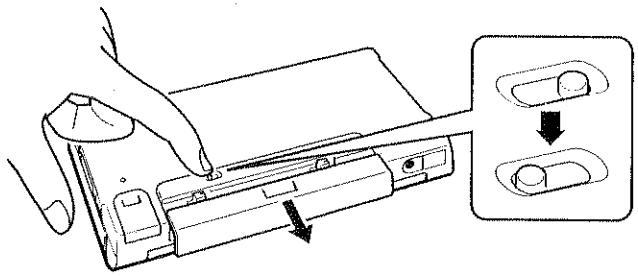
  Replace the back-up battery as soon as possible after the message shown below appears.

  "Your backup battery is very low or missing. Data loss may result from failure to replace the battery very soon."

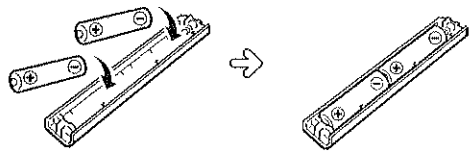
  Failure to replace batteries when they are low can result in corruption or loss of data stored in memory.

To replace the main batteries

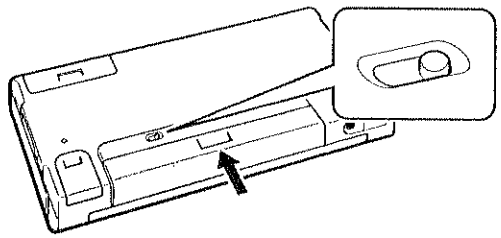
1. Make sure the CASSIOPEIA is turned off.
- If the CASSIOPEIA is on, press the power switch to turn it off.
2. Close the CASSIOPEIA and turn it over.
3. While holding the battery holder release in the "FREE" position, slide the battery holder from the CASSIOPEIA.



- While holding the battery holder release in position, grasp the center of the battery holder and carefully pull it from the CASSIOPEIA.
4. Remove the old batteries from the battery holder and load two new ones.
- When loading new batteries, make sure that their positive (+) and negative (–) ends are facing correctly.

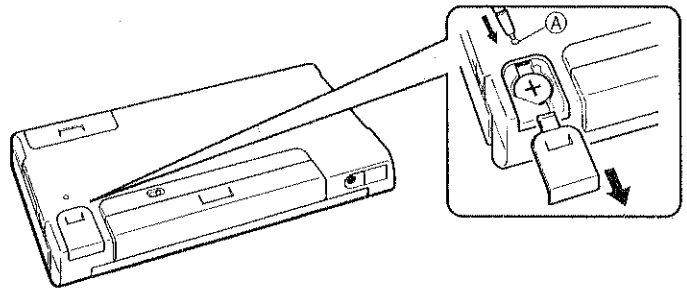


5. Reattach the battery holder to the CASSIOPEIA.
- The battery holder will emit a click and the battery holder release will automatically lock when the battery holder is securely in place.

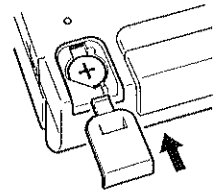


To replace the back-up battery

1. Make sure the CASSIOPEIA is turned off.
- If the CASSIOPEIA is on, press the power switch to turn it off.
2. Close the CASSIOPEIA and turn it over.
3. While pressing the release Ⓐ with the stylus, slide the back-up battery cover from the CASSIOPEIA.



4. Remove the old battery.
5. After wiping the surface of a new battery with a soft, dry cloth, load it into the CASSIOPEIA with its positive (+) side facing up (so you can see it).
6. Slide the back-up battery cover back on to the CASSIOPEIA until it snaps securely into place.



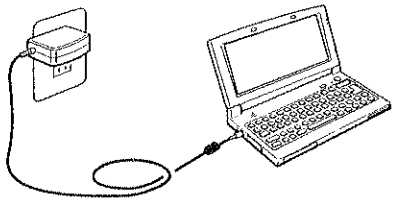
Important ⚠

Failure to observe any of the following battery precautions can cause batteries to leak, creating the danger of property damage, injury and fire due to explosion.

- When loading batteries, make sure their positive (+) and negative (–) poles are facing correctly.
- Never mix new batteries with old ones.
- Never mix batteries of different types.
- Use only the batteries that are specifically recommended for the CASSIOPEIA.

Using the AC Adapter

The AC adapter can be used as the main power supply of the CASSIOPEIA. The AC adapter is also used to supply power when charging the battery pack.



Attach the AC adapter to the CASSIOPEIA as shown in the illustration above.

Warning ⚠

- **Use only the AC adapter specified for this product. Use of another type of AC adapter creates the danger of CASSIOPEIA malfunction and bursting of the battery.**

Important ⚠

- Make sure that main batteries are loaded in the CASSIOPEIA even when you are using the AC adapter for power. The CASSIOPEIA will not work if main batteries are not loaded.
- Long term use of the AC adapter may cause it to become warm to the touch. This is normal and does not indicate malfunction.
- Be sure to unplug the AC adapter from the power outlet when you are not using it to supply power to the CASSIOPEIA.

Using the Rechargeable Battery Pack

A rechargeable battery pack can be used in place of the main batteries to power the CASSIOPEIA.

Warning ⚠

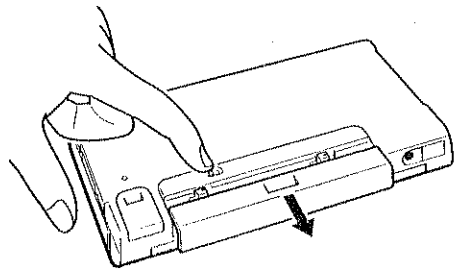
- **Use only the battery pack specified for this product. Use of another type of battery pack creates the danger of CASSIOPEIA malfunction and bursting of the battery pack.**

Important ⚠

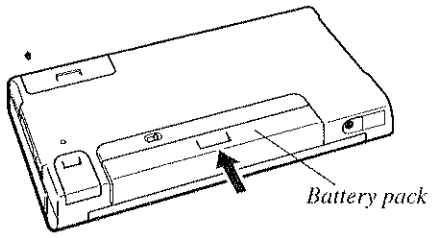
- Charge the battery pack in an area where the temperature is between 10°C (50°F) and 35°C (95°F). Charging in areas that are very colds or exposed to direct sunlight can cause deterioration and leaking of the battery pack.
- To avoid deterioration and leaking, the battery pack is designed to discharge even when you do not use the CASSIOPEIA. Be sure to recharge the battery pack at least once every three months, regardless of how much you use the CASSIOPEIA during that time.
- A battery pack that loses power too quickly after it is charged is probably near the end of its service life. In such a case, you have to purchase a new battery pack.

To load the battery pack

1. Make sure the CASSIOPEIA is turned off.
2. Close the CASSIOPEIA and turn it over.
3. While holding the battery holder release in the "FREE" position, slide the battery holder from the CASSIOPEIA.

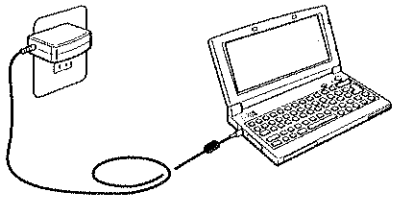


4. Attach the battery pack to the CASSIOPEIA.



- The battery holder will emit a click and the battery holder release will automatically lock when the battery pack is securely in place.

To charge the battery pack



Charging starts automatically when you connect the AC adapter to the CASSIOPEIA while the battery pack is attached. The charge indicator lights (green) to indicate that charging is in progress, and goes out when charging is complete.

- It takes about four hours to achieve a full charge.
- You can use the CASSIOPEIA while the AC adapter is connected for charging.

Note that the battery pack can be also charged whenever the CASSIOPEIA is attached to its cradle. See the documentation that comes with the cradle for details.

Adjusting Display Contrast

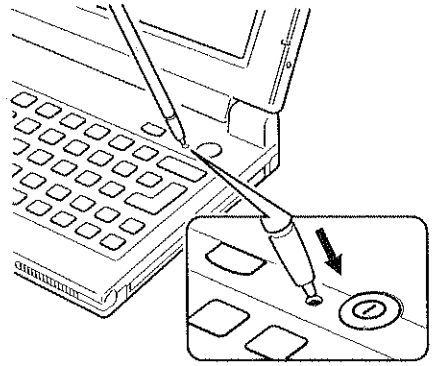
Adjust display contrast whenever the figures on the display become dim and difficult to see. To adjust display contrast, hold down [Alt] and press [<] (to make the display lighter) or [>] (to make the display darker).

Reset

You should reset the CASSIOPEIA whenever it stops working or whenever some other operational problem has caused it to malfunction.

To reset the CASSIOPEIA

1. Press the RESET button with the stylus.
   - This automatically turns off CASSIOPEIA power.



2. Press the power switch to turn on power and start the reset process.

What happens next depends on memory status.

Case A: Memory Contents Not Corrupted

In this case, the display changes in the sequence shown below.

Start up screen → Normal Desktop

Normal operation is restored after the desktop appears, with all memory contents and settings unchanged.

Case B: Memory Contents Corrupted

In this case, the message "A problem with memory contents has been found, and memory must be initialized..." appears on the screen. Use the stylus to touch the screen to change in the sequence shown below.

Start up screen → Set up screens

Set up the CASSIOPEIA as described on page 16 of this manual. The desktop appears after set up is complete.

When memory is seriously corrupted, the above procedure deletes all data stored in memory. When memory contents are not deleted*, save any data you need onto a computer disk or other medium and then perform the full reset procedure on page 25.

* Data may be corrupted, so edit data after checking it.

Full Reset

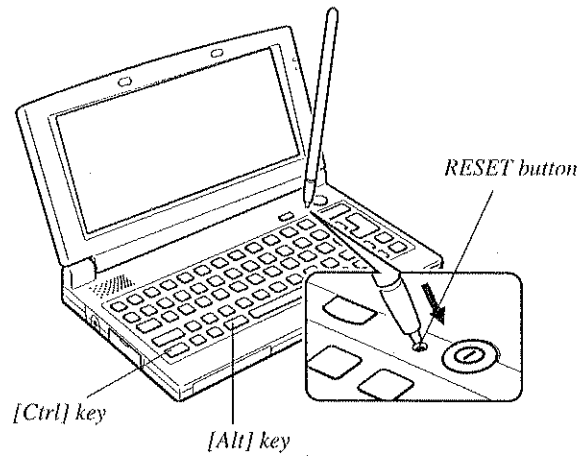
Perform the full reset when you want to clear all memory contents and settings because memory contents are corrupted, because you have forgotten the security code, or for any other reason.

Important ⚠

- The following procedure deletes all data in memory. Be sure to save any important data contents you may need later to a computer disk or other medium. Always keep separate back-up copies of important data.

To perform a full reset

1. While holding down the [Ctrl] key and the [Alt] key, press the RESET button.



2. The message "All memory contents will be deleted! Touch the screen to continue..." appears on the display.

- If you don't want to perform a full reset, press the RESET button. This performs the normal reset, which does not clear memory contents.

3. To continue with the full reset procedure and clear all memory contents, touch the screen with the stylus.

- The display changes in the sequence shown below.

Start up screen → Set up screens

- Set up the CASSIOPEIA as described on page 16 of this manual.

Continued errors following the Full Reset can indicate one of the following.

- A faulty CASSIOPEIA unit
- Unstable system due to failure to correctly perform the reset operation before using the CASSIOPEIA for the first time

If you suspect that the problem is due to incorrect resetting after you purchased the CASSIOPEIA, the procedure under "Perform the following operation if the screen remains locked even after you perform a full reset" on page 38 will restore proper operation.

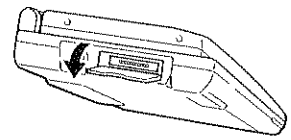
Connecting to a Desktop Computer

Use the following procedure to connect the CASSIOPEIA to a desktop computer.
Note that exchanging data with a desktop computer requires Microsoft Windows CE Services, which is on the Microsoft CD-ROM that is included with the CASSIOPEIA.

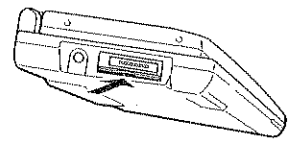
Requirements
RS-232C cable (supplied with CASSIOPEIA)

To connect to a desktop computer

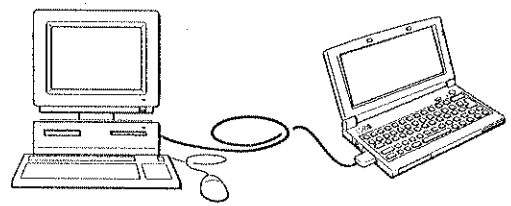
1. Open the RS-232C connector cover on the side of the CASSIOPEIA.



2. Slide the cover into the CASSIOPEIA case as shown below.



3. Use the RS-232C cable to connect the CASSIOPEIA to your desktop computer.



- You can also connect the CASSIOPEIA to your computer using the cradle. See the documentation that comes with the cradle for details.
- If your desktop computer supports infrared communications, you can also use CASSIOPEIA's infrared port to exchange data.

Replacing the PC Card

The CASSIOPEIA comes equipped with a PC card slot that supports memory, modem and other PC cards*.

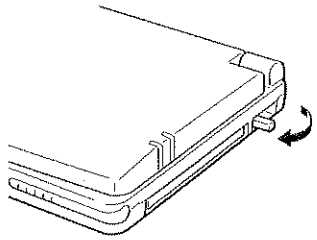
* Use only PC cards that are compatible with the CASSIOPEIA.

Important ⚠

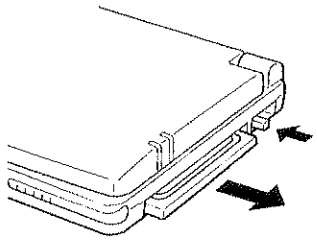
- Be sure to keep the dummy card that comes with the CASSIOPEIA inserted in the card slot whenever you are not using a PC card.
- Be sure to save any unsaved input or edited data before replacing the PC card.
- Never remove the PC card from the CASSIOPEIA while a PC card operation is in progress. Doing so can corrupt CASSIOPEIA memory and PC card memory.

To replace the PC card

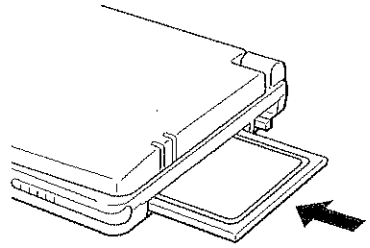
1. Extend the card eject button.



2. Press the card eject button to partially eject the card, and then pull the card out of the slot.



3. Insert a new PC card into the slot.



- Push the card into the slot as far as it will go.

Important ⚠

- Take care to orient the card correctly. The top of the card should be facing in the same direction as the top of the CASSIOPEIA. The card will stop part way into the slot if it is not oriented correctly.
- If the card stops part way into the slot, do not try to force it. Doing so can damage the card or the CASSIOPEIA. Remove the card, make sure it is oriented correctly, and then try inserting it again.

4. Return the card eject button back to its folded position.

Important ⚠

- See the documentation that comes with the PC card and the H/PC Companion manual for information on PC card operations.

Replacing the CompactFlash Card

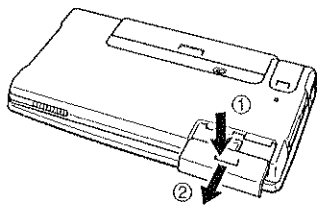
The CASSIOPEIA comes equipped with a card slot that supports CompactFlash cards.

Important ⚠

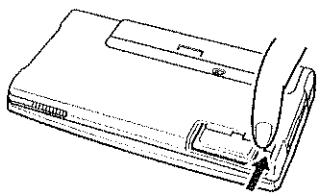
- If the card stops part way into the slot, do not try to force it. Doing so can damage the card or the CASSIOPEIA. Remove the card, make sure it is oriented correctly, and then try inserting it again.
- Be sure to save any unsaved input or edited data before replacing the CompactFlash card.

To replace the CompactFlash card

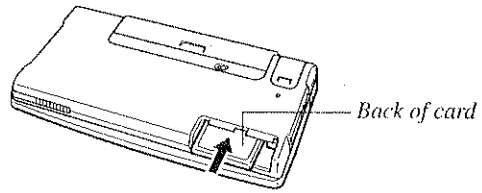
1. Make sure that CASSIOPEIA power is turned off.
2. While pressing down on the card cover ①, slide the cover from the CASSIOPEIA ②.



3. Press the card eject button to partially eject the card, and then pull the card out of the slot.



4. Insert a new CompactFlash card into the slot.
- Double-check to make sure that the card is oriented correctly before you insert it into the slot.



- Push the card into the slot as far as it will go.

Important ⚠

- Take care to orient the card correctly. The top of the card should be facing in the same direction as the top of the CASSIOPEIA. The card will stop part way into the slot if it is not oriented correctly.

5. Replace the card cover.

Important ⚠

- In order to protect data stored in memory, the CASSIOPEIA automatically turns off whenever you remove the card cover. Also, power will not turn on while the cover is removed.

Connecting to a Printer

Use the following procedure to connect the CASSIOPEIA to a printer.

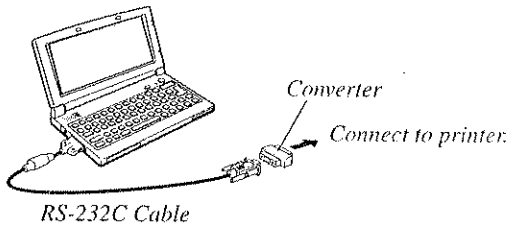
Requirements

- RS-232C cable (supplied with CASSIOPEIA)
- Converter (commercially available)*

* Use a printer or a converter that matches the interface shown on page 40.

To connect to a printer

1. Make sure the printer and the CASSIOPEIA are both turned off.
2. Connect the converter to the connector of the RS-232C cable, and then connect the cable to your printer and the CASSIOPEIA.



- If your printer supports infrared communications, you can also send data using the CASSIOPEIA's infrared port.

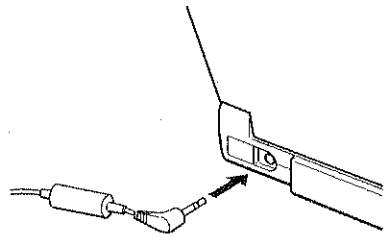
Connecting to External Equipment

You can connect external equipment to the data communication connector. You can also use special software to set up the CASSIOPEIA to exchange image data with a CASIO digital camera.
See the documentation that comes with the software for details.

Requirements
Optional data communication cable (SB-62)

To connect external equipment

1. Make sure the external equipment and CASSIOPEIA are both turned off.
2. Use the SB-62 cable to connect the CASSIOPEIA to the external equipment.



Infrared Data Communication

Infrared data communication capabilities let you exchange data between two CASSIOPEIA units, or with a computer or printer that supports infrared data communication. In any configuration, make sure that the infrared ports are facing directly at each other. See the H/PC Companion manual for information on infrared data communication.

Important ⚠

- Do not move the CASSIOPEIA or other unit while infrared communication is in progress.
- Infrared communication is impossible under sunlight, strong artificial light, and inverter type fluorescent lighting.
- The following conditions may also make infrared communication impossible.
    - The CASSIOPEIA and other unit are too far from each other.
    - The CASSIOPEIA and other unit are at too sharp of an angle from each other.
    - Ambient light conditions
    - Low battery power
- Dirt or dust on the infrared port can interfere with proper infrared communication. When this happens, use a soft, dry cloth to clean off the port.

Built-in and Additional Software

See the manual on the CD-ROM for details on how to use its software.

See the User's Guide on the CASSIOPEIA Bonus Software Applications CD-ROM for information on how to use the following built-in software application: Shortcut Key Registration. Information is also available using on-line help.

See H/PC Companion manual and on-line help for details on using other built-in software.

Troubleshooting Guide

Nothing appears on the display when power is turned on.		
Possible Cause	**Recommended Action**	**Page**
Display contrast setting is too light.	Adjust display contrast.	Page 22
Main batteries are dead.	Replace batteries.	Page 17
Card cover (CompactFlash card) is open.	Close the cover.	Page 30

The CASSIOPEIA does not operate under AC adapter power.		
Possible Cause	**Recommended Action**	**Page**
Main batteries are not loaded.	Load batteries.	Page 17
Main batteries are dead.	Replace batteries.	Page 17

Abnormal operation following battery replacement*		
Possible Cause	**Recommended Action**	**Page**
Batteries are not loaded correctly.	Remove the main batteries and reload them. • Make sure the positive (+) and negative (–) ends of the batteries are facing correctly. • Do not mix new batteries with old ones.	Page 18
Display contrast setting is too dark.	Adjust display contrast.	Page 22
Batteries were not loaded correctly.	Perform a full reset.	Page 25

* When the above steps do not correct the problem, remove the main batteries from the unit, and contact your original dealer.

The message "Your backup battery is very low or missing...." appears after the back-up battery is replaced.		
Possible Cause	**Recommended Action**	**Page**
Back-up was loaded with the negative (–) side facing up.	Remove the back-up battery and reload it correctly.	Page 19
Back-up was loaded before the main batteries, causing it to run down.	After confirming that main batteries are loaded correctly, load the back-up battery.	Page 17

The display is completely black or gray.		
Possible Cause	**Recommended Action**	**Page**
Display contrast setting is too dark.	Adjust display contrast.	Page 22
Power was turned off while the touch screen was being touched.	Touch the screen with the stylus.	
Static electricity	Use the power switch to turn the CASSIOPEIA off and then back on again.	

The touch screen does not respond.		
Possible Cause	**Recommended Action**	**Page**
Touch screen is out of position.	While holding down [⊞], press [|] to calibrate the touch screen position.	
Static electricity	Reset the CASSIOPEIA.	Page 23
Touch screen is damaged.	Contact your original dealer.	

The screen is locked up.		
Possible Cause	**Recommended Action**	**Page**
Abnormal operation	Reset the CASSIOPEIA.	Page 23
	If a reset does not correct the problem, perform a full reset*.	Page 25

The message "A problem with memory contents has been found, and memory must be initialized..." is on the display.		
Possible Cause	**Recommended Action**	**Page**
Abnormal operation	Tap the touch screen to reset the CASSIOPEIA. Next, save any important files you want and then perform a full reset*.	Page 24

* Perform the following operation if the screen remains locked even after you perform a full reset.

Important ⚠

- The following procedure deletes all data in memory.
- Do not reload data backed up on a computer after performing the procedure shown below. Data backed up while the CASSIOPEIA unit's system is unstable can contain unstable elements. Reloading such data into the CASSIOPEIA can cause the system to become unstable again.
- To prevent system instability when restoring data backed up on a personal computer, transfer the data to the computer synchronization* for schedule and address data. For Pocket Excel and Pocket Word data, drag and drop each item to copy it.

* See the H/PC Companion manual for details about synchronization.

1. Remove both the main batteries and the back-up battery from the CASSIOPEIA.
2. Wait for about five minutes.

3. Reload the main batteries.

- Be sure to load the main batteries first. The CASSIOPEIA will not operate properly if you load the back-up battery first. If you inadvertently load the back-up battery first, start over from step 1 above.
- Loading the back-up battery first can cause the battery go dead very quickly. Replace the back-up battery whenever the low back-up battery warning message appears on the display.

4. Wait for about five seconds and then turn on the CASSIOPEIA.

- Turning on power causes the CASSIOPEIA display to change in the sequence shown below.

See page 16 for details about setting up the CASSIOPEIA.

5. After setting up the CASSIOPEIA, turn it off.
6. Load the back-up battery.

After completing the above procedure, you can transfer any data you have saved on a disk or other medium into CASSIOPEIA memory.

Important ⚠

- You can also find useful information in the H/PC Companion manual.

Technical Reference

About CASSIOPEIA standard interfaces

The following describes the interfaces that are equipped on the CASSIOPEIA as standard.
Basically, operation should not be expected from any device that is not compatible with these interfaces*.

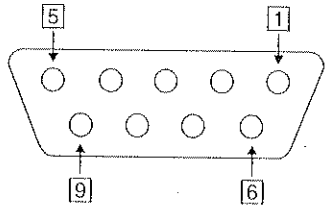
1. Serial Port: Requires a 16550 compatible UART with FIFO buffer. For RS-232C, Modem, and other connections.
2. Printer Interface: PCL 3 standard. For printers.

* Operation requires development of a separate driver using special development tools.

- Even when using a compatible peripheral, there still may be some minor incompatibilities.
- Some of the modem card models shown on the modem selection screen may not, in fact, be compatible.
- Be sure to read the Microsoft ReadMe file.

RS-232C interface

Pin	Signal Name
1	Data Terminal Ready
2	Transmit Data
3	Receive Data
4	Data Carrier Detect
5	GND
6	Data Terminal Ready
7	Clear To Send
8	Request To Send
9	Reserved



RS-232C Cable 9-Pin Connector

Hardware Specifications

Model: A-20
Display: 640 × 240 dots
FSTN LCD
4 grayscale monochrome
CPU: SH3
RAM: 8MB
Speaker: Sound
Interfaces:
RS-232C 115.2 KBPS
Data communication jack
PC card slot
CompactFlash card slot
Infrared port (IrDA-compatible protocol):
Communication distance: 10 to 70cm
Maximum Speed: 115.2 KBPS
Power Supply:
Main: Two AA-size alkaline batteries LR6 (AM3);
A-B10LT Rechargeable Battery Pack (lithium ion batteries);
AD-C50200 AC Adapter
Back-up: One CR2032 lithium battery
Power Consumption: 3.0W
Battery Life
Main: AA-size alkaline batteries: Approximately 25 hours repeating one minute of input in Word, followed by 10 minutes of display: Approximately 10 hours (input of 90 characters per minute in Word)

Rechargeable battery pack: Approximately 15 hours repeating one minute of input in Word, followed by 10 minutes of display: Approximately 10 hours (input of 90 characters per minute in Word)

- Main battery life is shortened by use of a modem card or PC card.

Back-up: Approximately 5 years when main batteries are replaced immediately after display of the message: "Your main batteries are running very low on power. Please change the batteries at your next opportunity."
Approximately 1 month when no power is supplied from the main batteries
Operating Temperature: 0°C to 40°C (32°F to 104°F)
Charging Temperature: 10°C to 35°C (50°F to 95°F)
Dimensions: 24.5H × 185W × 94D mm (1"H × 7¼"W × 3¹¹/₁₆"D)
Weight: 430 g (15.2 oz)
(with two AA-size alkaline batteries)